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EXAMINER

NGUYEN, QUANG N

ART UNIT	PAPER NUMBER
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2141

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/712,005

Applicant(s)

SHETH ET AL.

Examiner

Quang N. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 52-66 is/are allowed.
- 6) ☐ Claim(s) 1-51 and 67-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Detailed Action

1. This Office Action is responsive to the Amendment filed on 01/30/2007. Claims 1, 14, 27, 40 and 46 have been amended. Claims 72-74 have been added as new claims. Claims 1-74 are now pending.

Specification

2. The disclosure is objected to because of the following informalities:

On page 2, under section "Cross-Reference to Related Applications", the cited copending applications should be updated with current statuses such as U.S. Patent Application Serial No., the filing date, U.S. Patent No., and the issued date.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 1-39 and 67-74 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

5. Claims 1, 14 and 27 only appear to be producing a tangible result, which enables any usefulness of having determined "that said domain site identifier is included in a list of authorized domain sites". Under all other conditions (*such as, having determined that said domain site identifier is NOT included in a list of authorized domain sites*), the final result achieved is a determination which has not been used nor made available for use in the disclosed practical application. As such, no usefulness of having made the determination can be realized.

6. Claims 2-13, 15-26, 28-31 and 72-74 are dependent claims of claims 1, 14 and 27, consequently, they are rejected under the same rationale, at least by virtue of their dependency from the independent claims.

7. As to claims 27-39 and 67-71, it appears that claims 27-39 and 67-71 would reasonably be interpreted by one of ordinary skill as a system of "software per se", failing to fall within a statutory category of invention. Applicant's disclosure contains no explicit and deliberate definition for the term "means", and in the context of the disclosure and claims in question, one of ordinary skill would reasonably interpret the "means" as software applications. As such, the system of "means" alone is not a machine, and it is clearly not a process, manufacture nor composition of matter. Thus, the claims are not limited to statutory subject matter and are therefore nonstatutory.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims 1, 14 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. (US 6,119,160), hereinafter “Zhang”.**

The applied reference has a common inventor (**Aravind Sitaraman**) with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

10. As to claims 1, 14 and 27, **Zhang** teaches a method, apparatus and program storage device for controlling subscriber access in a network capable of establishing connections with a plurality of domain sites, comprising:

receiving, at an access server located on a wide area network, said access server coupled to a first communication network and a second communication network, a communication from a subscriber on said first communication network, said communication optionally including a domain site identifier associated with a domain site on said second communication network (**Zhang, Fig. 4, col. 8, lines 25-58 and col. 9, line 62 – col. 10, line 14**); and

authorizing subscriber access to said domain site on said second communication network upon determining, in response to said receiving, that said domain site identifier is included in a list of authorized domain sites associated with a virtual circuit through which said communication is received (**Zhang, col. 8, lines 25-58**).

11. Claims 1-2, 14-15 and 27-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Jacobson et al. (US 6,044,402), hereinafter “Jacobson”.

12. As to claim 1, Jacobson teaches a method for controlling subscriber access in a network capable of establishing connections with a plurality of domain sites, comprising:

receiving, at an access server located on a wide area network, said access server coupled to a first communication network and a second communication network, a communication from a subscriber on said first communication network (*i.e., receiving, at one of the gateway servers 106 located on a computer network 100 such as the Internet, i.e., Wide Area Network, said gateway server 106 coupled to a first subnet 102-1 and a second subnet 102-2, a communication packet 114 transmitted between*

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the protected hosts 104-1 within the subnet 102-1 and the remote hosts 104-2 within the subnet 102-2 as illustrated in Fig. 1) (Jacobson, col. 2, line 66 – col. 3, line 56), said communication optionally including a domain site identifier associated with a domain site on said second communication network (each communication packet 114 includes a destination physical address 154, wherein the destination physical address 154 is the physical address of a single device/terminal or the physical address of the gateway of a subnet, here, the destination physical address 154 can be implemented as a domain site identifier associated with a domain site on said second communication network) (Jacobson, col. 12, lines 33-59); and

authorizing subscriber access to said domain site on said second communication network upon determining, in response to said receiving, that said domain site identifier is included in a list of authorized domain sites associated with a virtual circuit through which said communication is received (the blocking controller determines whether the destination address 154 of the communication packet 114 in the connection information set, which is the network address of the destination, is in the network access list; if it is, then the connection is to be allowed) (Jacobson, col. 18, lines 42-53).

13. As to claim 2, **Jacobson** teaches the method of claim 1, further comprising terminating said communication when said domain site identifier is not included in said list (*if the destination physical address 154 is not in the network address access list, then the connection is to be blocked*) (**Jacobson, col. 18, lines 42-53**).

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14. Claims 14-15 are corresponding program storage device claims of method claims 1-2; therefore, they are rejected under the same rationale.

15. Claims 27-28 are corresponding apparatus claims of method claims 1-2; therefore, they are rejected under the same rationale.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. **Claims 3-5, 9-11, 16-18, 22-24, 29-31, 35-37, 40 and 42-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson, in view of Loehndorf, Jr. et al. (US 6,094,437), hereinafter "Loehndorf".**

18. As to claims 3-4, **Jacobson** teaches the method of claim 1, but does not explicitly teach said communication comprises a Point-to-Point Protocol (PPP) session, which in turn comprises a tunneling session and said PPP session is forwarded onto a tunnel associated with an assigned tunnel ID when said subscriber is authorized to access said domain site.

In an analogous art, **Loehndorf** teaches that the Point-to-Point Protocol (*PPP*) has been standardized by the Internet Engineering Task Force (*IETF*) to be used to allow Internet Protocol (*IP*) and other protocols (*such as IPX, XNS, AppleTalk, etc.*) to be sent over non-IP mediums such as the Public Switched Telephone Network (*PSTN*), ATM, Frame Relay, SONET, etc. in Internet communications. **Loehndorf** also teaches the IETF developed the L2TP (*Layer Two Tunneling Protocol*) to allow the PPP session to be tunneled over the Internet by establishing the tunnel using a tunnel ID (*i.e., forwarding PPP session onto a tunnel associated with an assigned tunnel ID*) (**Loehndorf, col. 1, line 43 – col. 3, line 25 and col. 11, lines 36-67**).

Therefore, it would have been obvious to one having ordinary skills in the Data Processing Art at the time the invention was made to combine the teachings of **Jacobson** and **Loehndorf**, since both references are directed to computer-to-computer session/connection establishing and managing, hence, would be considered to be analogous based on their related fields of endeavor. One would be motivated to do so for various purposes such as information hiding, adding needed functionality, or improving functionality by using the tunneling technology to enable one network to securely send its data via other networks' connections (**Loehndorf, col. 1, lines 33-54**).

19. As to claim 5, **Jacobson-Loehndorf** teaches the method of claim 4, wherein said tunnel session comprises an L2TP session (*the IETF developed the L2TP to allow the PPP to be tunneled over the Internet*) (**Loehndorf, col. 2, line 66 – col. 3, line 7**).

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20. As to claim 9, **Jacobson-Loehndorf** teaches the method of claim 5, wherein said determining further comprises:

issuing a tunnel ID request including domain site identifier and a virtual circuit identifier; and receiving a tunnel ID *(the routing function of L2TP access payloads is performed on the L2TP tunnel information, which includes the L2TP tunnel ID and call ID with the proper IP and UDP source and destination addresses, i.e., the incoming call tunnel addressing "ICT" that the L2TP Access Concentrator "LAC" communicates the service provider that it wishes to use, by the tunnel that it chooses to send data over)* (**Loehndorf**, col. 11, lines 10-55).

21. As to claim 10, **Jacobson-Loehndorf** teaches the method of claim 9, wherein an AAA server services said tunnel ID request (**Loehndorf**, col. 2, lines 32-46).

22. As to claim 11, **Jacobson-Loehndorf** teaches the method of claim 9, wherein said virtual circuit identifier comprises a VPI/VCI identifier (**Loehndorf** teaches that *IP packets may be transported as AMT cells, wherein it is well-known in the art that each ATM cell contains 48 bytes payload and 5 bytes header containing virtual path identifier "VPI" and virtual channel identifier "VC/" fields, which defines a channel*).

23. Claims 16-18 and 22-24 recite program storage device claims that contain substantially the same limitations as method claims 3-5 and 9-11; therefore, they are rejected under the same rationale.

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24. Claims 29-31 and 35-37 recite apparatus claims that contain substantially the same limitations as method claims 3-5 and 9-11; therefore, they are rejected under the same rationale.

25. Claims 40 and 42-51 recite access server claims that contain substantially the same limitations as method claims 1, 3-5 and 9-11; therefore, they are rejected under the same rationale.

Allowable Subject Matter

26. Claims 52-66 are allowed.

Response to Arguments

27. In the remarks, applicant argued in substance that

(A) Prior Art fails to disclose, teach, or suggest, *"the claimed access server located on a wide area network, which authorizes subscriber access to said domain site on said second communication network upon determining ... that said domain site identifier is included in a list of authorized domain sites associated with a virtual circuit*

through which said communication is received", as recited in claim 1 (see page 22 of the Remarks/Arguments).

As to point (A), **Jacobson** teaches receiving, at one of the gateway servers 106 located on a computer network 100 such as the Internet (i.e., the claimed access server located on a Wide Area Network), said gateway server 106 coupled to a first subnet 102-1 and a second subnet 102-2, a communication packet 114 transmitted between the protected hosts 104-1 within the subnet 102-1 and the remote hosts 104-2 within the subnet 102-2 as illustrated in Fig. 1 (**Jacobson, col. 2, line 66 – col. 3, line 56**), wherein each communication packet 114 includes a destination physical address 154, which is the physical address of a single device/terminal or the physical address of the gateway of a subnet, here, the destination physical address 154 can be implemented as a domain site identifier associated with a domain site on said second communication network (**Jacobson, col. 12, lines 33-59**); and it is determined whether the destination address 154 of the communication packet 114 in the connection information set (*i.e., it is determined whether the network address of the destination is in the network access list*), if it is, then the connection is to be allowed; if not, the connection is to be blocked (*i.e., authorizing subscriber access to said domain site on said second communication network upon determining, in response to said receiving, that said domain site identifier is included in a list of authorized domain sites associated with a virtual circuit through which said communication is received*) (**Jacobson, col. 18, lines 42-53**).

Hence, Prior Art does teach disclose, teach, or suggest, *"the claimed access server located on a wide area network, which authorizes subscriber access to said domain site on said second communication network upon determining ... that said domain site identifier is included in a list of authorized domain sites associated with a virtual circuit through which said communication is received"*, as recited in claim 1.

(B) As recited in claim 1 as amended, *"the claimed access is on a wide area network (WAN), and coupled to a first communication network such as a publicly switched telephone network (PSTN) or integrated services digital network (ISDN) and to a second network such as the WAN."* (see page 21 of Remarks/Arguments).

As to point (B), in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., *"the claimed access server coupled to a first communication network such as a publicly switched telephone network (PSTN) or integrated services digital network (ISDN) and to a second network such as the WAN"*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

28. Applicant's arguments as well as request for reconsideration filed on 01/30/2007 have been fully considered but they are not deemed to be persuasive and moot in view of the new ground(s) of rejection.

29. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Quang N. Nguyen
Patent Examiner
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